Appendix C Correlated PM₁₀ Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds¹ and PM₁₀ concentrations at select monitoring sites within the Salton Sea Air Basin on April 25, 2014 and April 26, 2014. See **Figure 2-5** for location of sites.

IMPERIAL COUNTY SELECT SITES (FIGURES C-1 TO C-2)



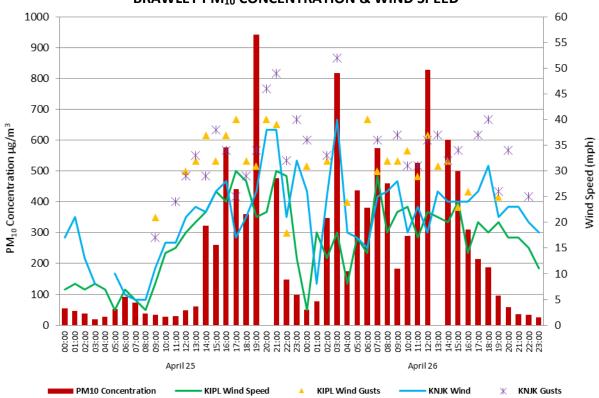


Fig C-1: Hourly concentrations at Brawley rose soon after wind speed increased on April 24, 2014. As wind speed reduced near midnight on April 26, 2014, concentrations briefly fell. As wind speed picked up around 01:00, concentrations likewise rose. As wind speeds began to subside late on April 26, 2014, concentrations began to return to normal. Imperial Airport and El Centro NAF are the two closest airfield upstream from Brawley. Air quality data from the EPA's AQS data bank. Wind data from the NCEI's QCLCD data bank

¹ National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); http://w1.weather.gov/glossary/index.php?letter=w]

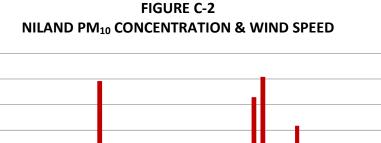
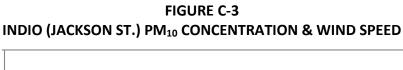


Fig C-2: Like Brawley, the Niland monitoring station likewise saw concentrations rise as wind speeds increased. Air quality and wind data from the EPA's AQS system

Wind Speed (mph) PM₁₀ Concentration µg/m³ April 26 April 25 ■ PM10 Concentration Wind Speed

RIVERSIDE COUNTY MONITORING SITES



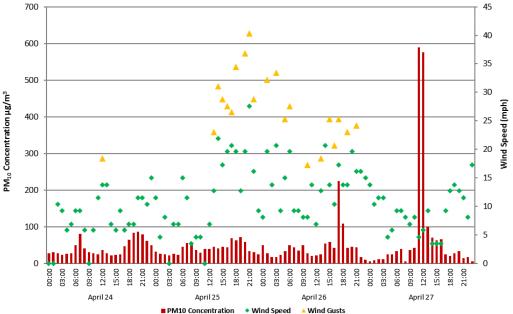


FIGURE C-4 PALM SPRINGS FIRE STATION PM $_{10}$ CONCENTRATION & WIND SPEED

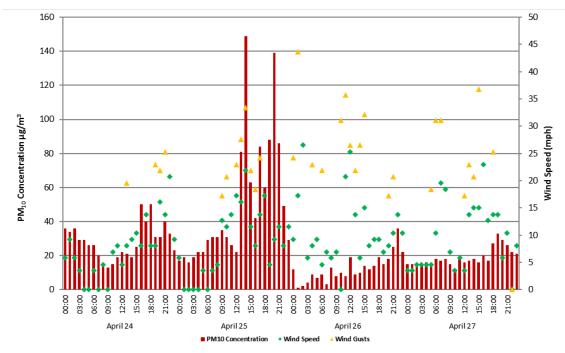
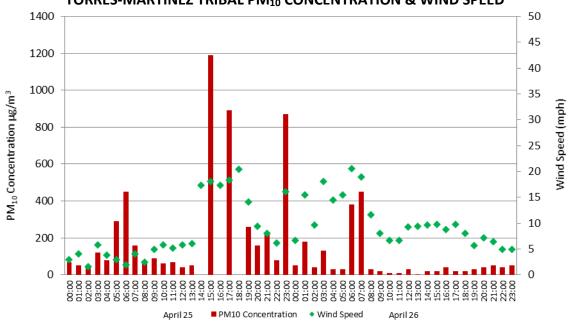


FIGURE C-5
TORRES-MARTINEZ TRIBAL PM₁₀ CONCENTRATION & WIND SPEED



Figs C-3 through C-5: Monitoring sites northwest of Brawley in Riverside County saw corresponding increases in particulate matter as wind speed increased during the day on April 25, 2014 and April 26, 2014. Air quality data from the EPA's AQS data bank

YUMA ARIZONA SITE

FIGURE C-6 YUMA, ARIZONA SUPERSITE PM_{10} CONCENTRATION & WIND SPEED

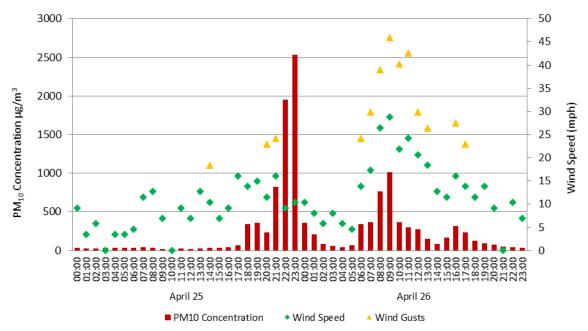


Fig C-6: Concentrations similarly rose as winds elevated at the Yuma, Arizona Supersite in southwestern Arizona, downstream from Brawley on April 24, 2014. Similarly, subsequent elevated concentrations and winds on April 26, 2014 during the early morning hours. Air quality data from the EPA's AQS data bank